
Name of Organization: Michigan Department of Agriculture

Type of Organization: State

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Project Title: Michigan Agricultural Environmental Assurance Program

Project Category: Pollution Prevention and Reduction - BNS

Rank by Organization (if applicable): 1

Total Funding Requested (\$): 40,000 **Project Duration:** 2 Years

Abstract:

The Michigan Agricultural Environmental Assurance Program (MAEAP) will work with farmers to voluntarily assess environmental risks on their farms and to form action plans to eliminate those risks. MAEAP is an industry led initiative in partnership with local, state, and federal government agencies; Michigan State University; conservation districts; and environmental and producer organizations.

The mission of the MAEAP is to develop and implement a recognized, proactive environmental assurance program which insures that Michigan farmers are engaging in cost-effective pollution prevention practices and are in compliance with state and federal environmental regulations.

MAEAP seeks to achieve its goals through:

- *Environmental protection through pollution prevention.
- *Targeting environmentally sensitive areas.
- *Affecting 85% of livestock production by 2005.
- *Affecting all new and expanding operations.
- *Voluntary approaches to environmental management.
- *Utilizing Education, Economic incentives, and Technical Assistance.
- *Coordinating with existing programs.

This comprehensive pollution prevention initiative is initially targeted at new and expanding livestock facilities and facilities located in environmentally sensitive areas. MDA will assist livestock producers to perform environmental risk assessments and develop action plans to minimize those risks (i.e. manure management for runoff abatement, streambank fencing to protect surface water quality, etc.). By utilizing whole-farm risk assessments, comprehensive nutrient management plans, educational requirements, and implementation of Generally Accepted Agricultural and Management Practices, MAEAP can provide an effective alternative to federal permitting programs. By year 2005, eighty-five percent of the livestock production in Michigan will receive MAEAP certification, demonstrating the farm community's commitment to sound, responsible environmental stewardship.

Geographic Areas Affected by the Project

States:

| | |
|--|---------------------------------------|
| <input type="checkbox"/> Illinois | <input type="checkbox"/> New York |
| <input type="checkbox"/> Indiana | <input type="checkbox"/> Pennsylvania |
| <input checked="" type="checkbox"/> Michigan | <input type="checkbox"/> Wisconsin |
| <input type="checkbox"/> Minnesota | <input type="checkbox"/> Ohio |

Lakes:

| | |
|--|--|
| <input checked="" type="checkbox"/> Superior | <input checked="" type="checkbox"/> Erie |
| <input checked="" type="checkbox"/> Huron | <input type="checkbox"/> Ontario |
| <input checked="" type="checkbox"/> Michigan | <input type="checkbox"/> All Lakes |

Geographic Initiatives:

| | | | | |
|--|----------------------------------|-------------------------------------|--------------------------------------|---|
| <input type="checkbox"/> Greater Chicago | <input type="checkbox"/> NE Ohio | <input type="checkbox"/> NW Indiana | <input type="checkbox"/> SE Michigan | <input type="checkbox"/> Lake St. Clair |
|--|----------------------------------|-------------------------------------|--------------------------------------|---|

Primary Affected Area of Concern: Not Applicable

Other Affected Areas of Concern:

For Habitat Projects Only:

Primary Affected Biodiversity Investment Area: Not Applicable

Other Affected Biodiversity Investment Areas:

Problem Statement:

The Michigan animal agriculture industry produces approximately 19 million tons of manure annually containing 112,000 tons of nitrogen (N), 69,000 tons of phosphorus (P), and 91,000 tons of potassium (K). This quantity of manure could provide about 18% of the N, 37% of the P, and 25% of the K needs of the state's primary crops.

An important aspect of good farming practices requires that the farmer manages manure in a manner that minimizes or eliminates any negative effect on the environment. This requires that the farmer consider the total management aspects of the manure management system, rather than only individual parts of the system.

This often requires farmers to re-think the role of manure on the farm (treating manure as fertilizer resource to be utilized, rather than treating it as a waste that needs to be disposed). This paradigm shift often requires an enormous amount of effort (educational, technical assistance, and cost-share) on behalf of government and educational entities. The MAEAP will initially coordinate these efforts to address manure management concerns, which are most pressing. Pesticide and fertilizer management issues will be addressed once the manure management model is completed.

Proposed Work Outcome:

MAEAP will develop a three-phase program delivery system. Phase one will include educational programming which will treat manure management as a component of a total farm management plan (along with pesticide management, fertilizer management, fuel storage, etc.). Phase two will consist of an on-farm assessment which will identify and quantify environmental risks. Phase three will include risk abatement and farm certification.

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Project Milestones:**Dates:**

| | |
|--|---------|
| Project Start | 10/2000 |
| Develop educational/outreach materials | 10/2000 |
| Develop manure mgt. certification pgm. | 01/2001 |
| Develop on-farm technical assistance | 01/2001 |
| Institute Phase One Programming | 01/2001 |
| Institute Phase Two Programming | 06/2001 |
| Institute Phase Three Programming | 06/2001 |
| Project End | 09/2005 |

☐ Project Addresses Environmental Justice

If So, Description of How:

☒ Project Addresses Education/Outreach

If So, Description of How:

Michigan State University Extension (MSUE) will assume primary responsibility for developing and implementing a comprehensive MAEAP educational effort. Farmer workshops, to be conducted throughout the state, will be developed utilizing video and printed materials. An on-farm assessment tool (based on existing Farm*A*Syst materials) will serve as the one-on-one risk identification instrument.

Farmers will be the primary audience. Initially, farmers will receive the tools needed to develop an understanding of the potential effects of their farming practices on the environment. In some instances, this may be all that is needed to effect an elimination of on-farm environmental risks. In most instances, however, this will serve as a gateway to the on-farm risk assessment, which is conducted one-on-one with a trained technician. This risk assessment will identify any environmental risks on the farm, and will identify ways to reduce or eliminate those risks.

Project Budget:

| | Federal Share Requested (\$) | Applicant's Share (\$) |
|----------------------------|-------------------------------------|-------------------------------|
| Personnel: | 0 | 49,000 |
| Fringe: | 0 | 21,000 |
| Travel: | 0 | 5,000 |
| Equipment: | 0 | 5,000 |
| Supplies: | 0 | 5,000 |
| Contracts: | 40,000 | 264,500 |
| Construction: | 0 | 0 |
| Other: | 0 | 125,000 |
| Total Direct Costs: | 40,000 | 474,500 |
| Indirect Costs: | 0 | 0 |
| Total: | 40,000 | 474,500 |
| Projected Income: | 0 | 0 |

Funding by Other Organizations (Names, Amounts, Description of Commitments):

Michigan Corn Growers Association: 20,000 (Planner certification materials)
Michigan Soybean Association: 20,000 (Presentation Materials)
Michigan State University Extension: 40,000 (Program Manager)
Michigan Department of Environmental Quality: 25,000 (Program Manager)
Michigan Cattlemen's Association: 10,000 (On-Farm Technical Assistance Materials)
Michigan Milk Producer's Association: 10,000 (On-Farm Technical Assistance Materials)
Michiga Pork Producers: 10,000 (Manure Management Software)

Description of Collaboration/Community Based Support:

The following organizations are providing input and guidance as the MAEAP is being developed:

Michigan United Conserveation Clubs
Michigan Land Use Institute
Michigan State University Extension
USDA-Natural Resources Conservation Service
Michigan Department of Environmental Quality
Michigan Pork Producers
Michigan State University Institute of Water Research
Michigan Farm Bureau